



**ZdravReform**  
**ЗдравРепорм**

**TRIP REPORT NO. UKR-46**

**STRENGTHENING THE PRIMARY CARE  
DELIVERY SYSTEM  
IN KODYMA RAYON, UKRAINE  
February 22 to March 11, 1997**

Prepared under the Task Order 324  
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## **SUMMARY**

The goal of this consultation was to evaluate primary health care reforms accomplished in Kodyma Rayon, Odessa Oblast, Ukraine, and make recommendations for further reform. Several recommendations made last year were followed, including a reduction in beds and consolidation of some surgical services at Central Rayon Hospital (CRH) and decreases in the seven district hospitals from 30-50 beds each to 15 beds each. User fees were attempted but were not successful.

Budgetary realities are forcing further changes. The twelve inpatient departments of CRH will be integrated into four units. The seven district hospitals will be closed. Many workers will be laid off. At least one group of doctors will begin to practice privately in Kodyma. Mobile brigades will be developed to follow regular routes to health centers, schools, and other centers.

Recommendations for future primary care revolve around feldsher points and polyclinics. Feldsher training and status should be enhanced. With training, specialist doctors should increase the breadth of their practices. With guided training in Odessa and L'viv, advocates and teachers for primary care should be created. Ministry of Health and Oblast regulations should be changed to enhance primary care. Financial incentives should be developed to encourage primary care. Future consultants should concentrate on management and behavior change.

### **1.0 Background**

Kodyma Rayon is a rural, agriculturally-based area in the northwestern part of Odessa Oblast. The economy of Kodyma is severely depressed, and as is the case for most of Ukraine, funds available for health care are limited.

As part of the *Zdrav/Reform* Program (ZRP) in the Ukraine, Odessa Oblast was selected as an Intensive Demonstration Site (IDS) nearly two years ago, and Kodyma Rayon as a rural pilot project within that IDS. ZRP consultants assessed the health care system in Kodyma in December 1995, and recommended actions to increase efficiency and decrease costs. Several of the recommended actions were taken.

Abt Associates, Inc., which coordinates ZRP, requested consultation from the NADIYA group of the University of Colorado Health Sciences Center, Department of Family Medicine, to evaluate the reforms accomplished in Kodyma, and make recommendations for further reform.

## **2.0 Objectives**

- 2.1 Assess primary care in the existing health care system in Kodyma Rayon, including recent reforms, and recommend further reforms to strengthen the primary care delivery system.
- 2.2 Further the development of a model for providing rural primary care that could be replicated in other parts of Ukraine.

## **3.0 Activities**

24 February: Orientation in ZRP office in Odessa. Review of documents gathered by Tom Wittenberg, Director of the Odessa office (He was out of town). Met with Dr. Akim Litvak and Dr. Vladimir Maurodiy, from the Oblast Health Administration, to outline scope of work and begin to receive information.

25 February: Travel with team by car to Kodyma. 4.5 hours. Team is Tom Wittenberg; Ludmilla Omelchenko, MD, ZRP associate from Kiev; Natasha Antanasova, MD, ZRP employee in Odessa; Dr. Maurodiy; Sergey Kolesnick and Ira Zabolotnaya, interpreters; and Valery Dobromislov and Slavic Ovseantsky, drivers. Establish living quarters in feldsher clinic in Serbi, nine kilometers from Kodyma. Meet with Deputy Mayor of Kodyma on Social Policy Mr. Trostyanetskiy to explain objectives and plan for work. Dinner with the feldsher, Boris Nedbas and his family.

26 February: Discussion with feldsher, Boris Nedbas, and watched encounters with various patients. Tour of feldsher clinic. Meet with Dr. Vitaly Borsch, Chief Doctor of Kodyma Rayon health system and his Deputy for the Health Network, Dr. Maxim Sucovaty to go over objectives and plans. Travel to District Hospital and Polyclinic in Labushnoe. Tour polyclinic and hospital, discussion of hospital and polyclinic operations with Dr. Olenitskaya, dentist and Director. Late afternoon lunch with hospital and local communal farm personnel.

27 February: After visit to local outdoor market, Wittenberg and other team members return to Odessa. Drickey, Omelchenko, Antanasova, Kolesnick, and Ovseantsky traveled to District Hospital and Polyclinic in Zagnitckovo. Tour of hospital and discussion with Dr. Zhurba, Chief Doctor and feldsher Maystruk. Lunch with part of hospital staff, continuing discussion of current operations and challenges. Attempted visits to two feldsher clinics, but feldshers out seeing patients. Omelchenko departed for Kiev.

28 February: Traveled to District Hospital/Polyclinic in Shershentsi, near Muldovian border. Tour and discussion with Dr. Boroshko, pediatrician and Chief Doctor and feldsher Pendrakovskiy. Visited two feldsher clinics in afternoon, one in Pisarevka, and the other in Grabovo. Spoke with feldshers Kiydalouk and Kolomiets and Nurses Nazarchuk and Luzhanskaya about the roles of feldshers and nurses.

1 March: Visited two feldsher clinics in Lysogorka and Pirizhna. Discussion with Head Nurse Kryshko and feldsher Snigur. Lunch in second feldsher clinic. Worked on report in afternoon in Serbi.

2 March: Free day. Travelled with work companions to cultivated park 2.5 hours from Kodyma. Dinner with Boris Nedbas and family, the feldsher, in Serbi.

3 March: Toured Kodyma Central Hospital and Polyclinic. Discussion with Dr. Victor Tokarchuk, Deputy Chief Doctor in charge of therapeutics in the hospital. Polyclinic tour and discussion with Dr. Ivan Tiosa, Chief Doctor of Polyclinic. Tour of specialized infectious disease wards and discussion with Dr. Valeriy Lengardt, Chief of Infectious Diseases.

4 March: Traveled to Katovsk to tour the medical school, site of feldsher training, to learn more about feldsher basic training. Discussion and lunch with Dr. Sergey Sholopa, Director of the medical school.

5 March: Wittenberg, Zabolotnaya, and Dobromislov return to Kodyma from Odessa. Drickey presents report of his findings and recommendations to a group of 42 (See Appendix 7.6), including the deputy mayor and physicians, feldshers and nurses from Central Rayon Hospital and several of the district hospitals and feldsher clinics. Followed by discussion. Followed by lunch for all participants, hosted by ZRP.

6 March: After visit to outdoor market, return to Odessa, 4.5 hours by car. Work on report in PM. Dinner with Wittenberg and Lissfelt.

7 March: Work in office until 2 PM. Lunch and celebration of International Women's Day in afternoon and evening.

8 March: International Women's Day (holiday). Work on reports. Walking tour of parts of Odessa.

9 March: Worked on reports half day. More walking tour in PM. Opera in the evening.

10 March: International Women's Day official holiday. Worked on reports. At noon, meeting and discussion with Dr. Oleg Pivak, General Pediatrician and Chief Doctor of Children's Polyclinic #6, and his associate, Dr. Sereda, at their request. Useful discussion of primary care and changes that Dr. Pivak has accomplished in his clinic. More report writing in afternoon.

11 March: Presentation of findings and recommendations to Oblast health authorities:

Dr. Alexander Karvietsky, Head of Odessa Oblast Health Administration  
Dr. Vitaly Borsch, Chief Doctor, Kodyma Central Rayon Health System  
Dr. Akim Litvak, Advisor to Oblast Health Administration

Dr. Vladimir Kolodenko, Pro-rector, Odessa Medical University  
Dr. Vladimir Gritsenko, Chief Doctor, Kominternovo Central Rayon Hospital  
Dr. Marina Kalueva, Oblast Deputy, Pediatrics  
Dr. Alexander Liman, Chief Doctor, Oblast Childrens' Hospital  
Dr. Nelly Gozhenko, Head of Polyclinic, Oblast Central Hospital  
Dr. Igor Kushokovsky, Oblast Deputy, Psychiatry  
Dr. Igor Bitchov, Chief Doctor, Razdelnaya Central Rayon Hospital  
Dr. Andry Gaiduk, Director, Dneipropetrovsk Family Medicine Clinic  
Dr. Zhanna Parkhomenko, ZRP Technical Advisor (Kiev Office)

Meet with Dr. Andrey Gaiduk, Chief Physician of the Family Medicine Clinic in Dnepropetrovsk, and Dr. Zhanna Parkhomenko, from the ZRP Kiev office. Discussion of the report just completed and responses to it, and of innovations made by Dr. Gaiduk in his facility favoring primary care.

Leave Odessa for home by airplane at 5:35 PM.

#### **4.0 Findings**

The reality of the situation encountered in Kodyma lent urgency to the task of this consultation. The health care system is almost entirely bankrupt, similar to most other service sectors -- similar indeed to the entire economy except for some new, private enterprises. Dr. Vitaly Borsch, the hardworking and creative Chief Doctor of the Kodyma health system, is in a very difficult position. He must make extensive and drastic changes in a system that for many years had provided free, complete care based on a hospital and specialty-physician model that provides extensive employment in the Rayon.

Within the week prior to this consultation, budgetary reality for the next year began forcing some of the changes discussed for the past year. To maintain even the current dysfunctional system would require 3.2 million Hryvnias (U.S.\$1.8 million), and the Odessa Oblast will provide only 1.1 million Hryvnias (U.S.\$610,000). Thus the timing of this consultation was particularly appropriate.

Another reality adding to a sense of urgency is that, although USAID will extend the ZRP contract for another year, most Abt resident expatriate advisors will remain only until May 1997, followed by frequent short term consultations. Ukrainian personnel will inherit principal responsibility for making the necessary changes to establish a primary health care system.

Kodyma is the city center of Kodyma Rayon, an agricultural region located in the northwest corner of Odessa Oblast. This region relies almost entirely on agriculture and agriculture-related business. The population of Kodyma Rayon, approximately 37,000, decreased by 10.3 % in 1994, and 12.1 % in 1995.

The Kodyma health care system is based on the Central Rayon Hospital in Kodyma, and seven district hospitals distributed around the rayon. In addition, 17 feldsher points are located in smaller towns, populations 100 to 2000, around the rayon. Sixty-seven physicians, and 253 nurses and feldshers are employed in the system. Hospital beds in the past have totaled 575, for a population of 37,000. In 1995 only 85.7% of the bed capacity was used, despite an average length of stay of 15.9 days. Many of the beds were occupied by patients who could be treated as outpatients, or by “social patients” who would be unable to care for themselves at home, but who would not require hospital care if some nursing home-type facility were available.

The health care system has been severely underfinanced for several years, due to the collapse of the economy since the dissolution of the Soviet Union in the early 1990s. None of the health care workers has been paid for eight months. Except for some emergency medicines, patients must purchase their own medications and x-ray film for out-patient and in-patient care. The system is in debt for 450,000 Hryvnas (US\$250,000) in back wages, and 20,000 Hryvnas (US\$11,200) for medications.

#### **4.1 Central Rayon Hospital**

The Central Rayon Hospital consists of 250 beds in 12 departments. It is staffed by 60 specialist physicians and 152 nurses and feldshers. The hospital provides a range of services including internal medicine and its subspecialties, with a separate infectious disease building, surgery and its subspecialties and anesthesia, pediatrics, obstetrics and gynecology, radiology, psychiatry, and physical therapy.

The hospital has undergone some organizational restructuring in the past year, including a reduction in beds and consolidation of some surgical services.

The hospital is the site of a large polyclinic that includes clinics in all specialties, including dental, and is staffed by specialist doctors from the hospital. The polyclinic is organized into smaller centers, each of which receives patients from separate districts of Kodyma city. Patients referred for admission from the district hospitals, polyclinics, or feldsher clinics are evaluated first in the polyclinic.

#### **4.2 District Hospitals**

The seven district hospitals around Kodyma Rayon have all been decreased in size in the past year from 30-50 beds each, to 15 beds each. Each district hospital is staffed by at least one physician and one dentist, and several nurses and feldshers. A number of vacant positions currently exist.

#### **4.3 Polyclinics**

Each district hospital serves as its own polyclinic for outpatient care, staffed by the physician, feldshers and nurses. Patients self-refer or are referred by feldsher points

for outpatient evaluation and treatment. The polyclinic of the Labushnoe District Hospital is located in a separate building in the village.

#### **4.4 Feldsher Points**

A feldsher is similar to a mid-level provider in the U.S. Feldshers work at the primary care level in the villages, or in a hospital or clinic. Their training takes 2.5 to 4 years. They are trained by doctors and others. They provide many basic services including preventive and some acute care and follow-up care. Many doctors were former feldshers.

Each feldsher point or feldsher clinic consists of several rooms, in which patients are seen. Most feldsher points are staffed by a feldsher, an obstetrical feldsher, a nurse or assistant, a public health nurse, and a physical therapist.

Currently, feldshers respond any time, day or night to calls from patients to see them in their homes.

#### **4.5 Pharmacy System**

The state-owned pharmacy system is under a different administration than the rest of the health care system, under a different ministry, and is well-supplied. The pharmacy system has entered into some joint ventures with non-Ukrainian enterprises and has achieved some degree of privatization. The health care system has no money for medicines, except for some emergency medications. Patients are required to buy medications at state-owned pharmacies in various villages and in Kodyma. X-ray film is purchased in the pharmacy system also, and is plentiful.

#### **4.6 Technical Quality of Care**

In discussions with physicians and feldshers, basic medical knowledge and theory seem to be similar to the U.S. However, in all sites visited, various pieces of medical equipment with no equivalent in the U.S. were observed. These include electromagnetic wave machines, blue lights, and ultrasonic machines to be applied to various parts of the body (eg. the ear for ear pain). The personnel state that they use these machines more often when they have insufficient medicines, and state that the machines have an important placebo effect.

One Abt employee spoke of visiting a physician in Odessa for a severe ear ache. No exam of the ear took place. For diagnosis, the patient was asked to hold a metal rod and place the rod near various parts of the body. Another similar metal rod was placed in a solution, and the physician switched various switches and asked the patient how she was feeling at various points in the examination. During this procedure the patient's eardrum burst (unrelated to the procedure), and the physician prescribed an incorrect antibiotic.



The above incident is mentioned only as an indicator of possible difficulties with technical quality of care.

#### **4.7 Primary Care Delivery in Kodyma Rayon**

A majority of true primary care in rural Kodyma takes place in the feldsher points. Feldshers are the unsung heroes of primary care. Feldshers are **clinicians who provide accessible (if not integrated) health care services and (could be) accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.**

Primary care takes place also in the polyclinics, but is less well **integrated and accessible** there. Very little provider-patient continuity is evident in the polyclinic setting. Specialist doctors are able to provide primary care, but various specialists are required in a single setting because specialists' skills are limited to certain age groups or biological systems (eg. pediatrics or cardiology).

Some specialist doctors stated that they already do family medicine and that specialist doctors can “easily” do general practice. They made statements such as, “The physiology is all the same.” “Children are just little adults.” “Prenatal care is easy.” These concepts are incorrect for several reasons:

1. Specialist doctors have forgotten much of what they learned in general medical university training that is not applicable within their own specialty.
2. Approaches to patients in different age groups and to diseases within different age groups are distinct. To be able to see and treat patients in different age groups, and in different disease categories requires additional knowledge and training.
3. Primary care is more than merely a combination of specialties. Primary care requires knowledge and skill in psychology, behavior change techniques, and prevention, to name but a few areas.

##### **4.7.1 Staffing for Primary Care**

Staffing in the polyclinics and feldsher points seems more than adequate to provide primary care. In fact, with broadened skills (See Section 5.0 Recommendations for Future Reforms), less personnel should be required.

##### **4.7.2 Logistical Support**

a) Equipment currently is not adequate to provide primary care. As seen in the L'viv study last year,<sup>1</sup> the addition of some fundamental diagnostic tools such as otoscopes, ophthalmoscopes and EKGs could greatly increase the primary care capabilities of the system.

b) Office space is adequate to provide primary care at most facilities visited.

c) The patient record system was described well in the L'viv study,<sup>2</sup> and does not differ greatly in Kodyma. Currently, patients' medical records reside in several different places -- preventive care records in one location, ambulatory clinical records in a different location, and acute hospitalization records in a third location. Modifications to unify the patients' medical records will be necessary and will evolve as primary care develops.

d) Administrative and management systems are centralized, with all or most decisions made by upper level administration. At the feldsher clinic level, minimal administrative support is necessary, and could be managed at the feldsher level by current personnel. As new procedures such as user fees are implemented the administrative burden will increase.

e) As seen in the L'viv study last year,<sup>3</sup> the addition of some simple laboratory equipment such as elementary glucometers and urine dip stick tests would greatly increase the primary care capabilities of the system.

#### **4.7.3 Patient-Provider Relationships**

Patients at the feldsher clinic level generally spoke highly of their feldsher providers. Usually the feldsher is someone from the town where the feldsher clinic is located, or has practiced there for a number of years (range: 6 months to 22 years).

Health care appears to be very provider-centered. That is, the patient comes to the provider, the provider makes an assessment and prescribes treatment, and the patient accepts the treatment. There is little education of the patient about their condition, or involvement of the patient in decision-making about their own health.

Some prevention and screening activities seem excellent. Immunizations and pap smears are practically required for all appropriate patients, and outreach takes place if a patient fails to come in for these preventive activities. Prevention education in other areas is not pursued vigorously. For example, smoking and alcohol abuse are rampant.

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<sup>1</sup> Reeves, J. and Wouters, A., Strengthening Clinical and Economic Aspect of Family Medicine in the L'viv Oblast, Abt Associates, Inc., October 21, 1996.

<sup>2</sup> *ibid.*

<sup>3</sup> *ibid.*

However, apart from a few signs advising of the ill-effects of tobacco and alcohol, no active patient education takes place.

Patient privacy is almost non-existent in most of the sites surveyed. Health workers and other patients enter exam rooms without knocking, often while the patient in the room is undressed. Patient gowns are not used. Patients themselves seem unphased by this lack of privacy.

In a discussion about AIDS with the Chief of Infectious Diseases, it is clear that the concept of confidentiality exists, at least with regard to AIDS. The extent to which confidentiality is maintained could not be determined.

#### **4.8 Reforms in Kodyma in the past year**

##### **4.8.1 Hospital Downsizing**

In the past year the number of hospital beds in Kodyma Rayon was decreased from 575 to 365, mostly by reducing beds in the district hospitals.

##### **4.8.2 User Fees**

User fees were attempted in the past year, but were not successful because people do not have the money, or would prefer to pay with goods. The people have been accustomed to free and plentiful services for many years, so it is difficult for them to understand that now they must pay for some services.

#### **4.9 Current Plans for Future Reforms**

As mentioned, budgetary realities for the next budget period are forcing some changes that were recommended last year.

##### **4.9.1 Reorganization of Central Rayon Hospital**

Plans are being made for further reorganization of the Central Rayon Hospital. The twelve inpatient departments will be integrated into four units: polyclinic, internal medicine, surgery, and obstetrics/gynecology.

##### **4.9.2 Closure of District Hospitals**

The seven district hospitals will be closed. Many workers will be laid off.

##### **4.9.3 Formation of Groups of Doctors for Private Practice**

Dr. Borsch is planning to encourage the formation of at least one group of doctors to practice privately in Kodyma. The group of doctors would include doctors who have

been laid off from the Kodyma Health System, or who have had their positions reduced to part time. The plan calls for the private group to lease space in which to practice in closed sections of the Central Rayon Hospital. Detailed plans have not been developed.

#### **4.9.4 Mobile Brigades**

Dr. Borsch hopes to implement a plan for “mobile brigades.” A doctor, nurse and/or feldsher and driver will work in an ambulance, following a regular consistent route to health centers, schools, and other centers where patients will come to see them. They will also respond to emergency calls from patients at home. The physician staff in the mobile brigades will be former specialists from the district hospitals. They will receive prior additional training, but no current plan, nor do funds exist for training.

### **5.0 Recommendations**

#### **5.1 *Emphasize Primary Care in the Feldsher Points and Polyclinics***

a) The majority of new or converted resources for training and equipment should be directed toward feldsher points and polyclinics, with emphasis on the feldsher points.

b) The Central Rayon Hospital, after restructuring, should receive resources only for maintenance of basic secondary level services such as surgery, childbirth, and minimal hospitalizations. For illness, the hospital should be considered as a place of last resort.

#### **5.2 *Enhance Feldsher Training and Status***

a) Immediate efforts should be made to provide on-going increased training for feldshers to broaden their skills. Current monthly educational activities should be geared toward broadened skills.

b) Feldsher basic training in medical school should be reviewed and enhanced to broaden skills.

c) Appropriate portions of curriculum developed in L’viv family medicine training should be integrated into basic and on-going feldsher training.

d) With increased training and skills feldsher status will be enhanced. Their status should be further enhanced by publicly honoring them, stating that they are the basis of the primary health care system.

#### **5.3 *The Place of Family Medicine Doctors***

a) The family medicine doctor program developed in L'viv, should be continued and expanded to other Oblasts in Ukraine, including Odessa Oblast.

b) The family medicine movement should be supplemented enhanced feldsher training and status.

c) In rural areas, such as Kodyma Rayon, family medicine doctors would best be placed in free-standing ambulatories, as supervisors of feldshers, and as the next step in the referral ladder from the feldsher points. Feldshers are the appropriate health care providers for small villages. The appropriate size used to determine whether a village should have a family doctor or a feldsher will depend on the local context, including finances. Experience in the United States suggests that a family physician can manage the primary care of 1,600 to 2,000 people effectively.

#### **5.4     *The Place of Specialist Doctors***

a) In order to increase efficiency in the Kodyma Rayon health system, specialist doctors must increase the breadth of their practices. Specialist doctors can become primary care doctors, but the transition requires additional training. They must learn new skills to broaden their practice, to see a greater variety of people and problems.

b) Specialist doctors should be used to train each other in small multispecialty groups in the polyclinics.

c) Specialist doctors should receive guided additional training in the feldsher points.

#### **5.5     *Create True Advocates and Teachers for Primary Care***

a) Select one or two physicians and one or two feldshers who are bright and motivated to change and learn, and who would be good teachers. Send them to the four-month Family Medicine Course in L'viv to bring back the material and organize family medicine education in classes and apprenticeships in Odessa Oblast and Kodyma Rayon. If the four-month course is not possible, the future advocates should spend at least one month in L'viv to see the breadth of practice that is possible. Perhaps the training could be spread over several periods of time, to minimize time away from job responsibilities and family in Odessa or Kodyma.

b) Alternatively, send only one physician or feldsher, who would be a good teacher, to the four-month Family Medicine Course or several shorter periods of time in L'viv, to return to organize family medicine education in Odessa Oblast and Kodyma Rayon.

c) Abt Associates, Inc. should consider the possibility that the cost of a single short term consultant from the United States is probably equivalent to the cost to support at least one Ukrainian from Kodyma or Odessa in the four-month course in L'viv.

d) Alternatively or additionally, provide a physician or physician assistant from the United States for six months to a year to set up a family medicine education program in Odessa Oblast and Kodyma Rayon. Possibilities include a Peace Corps Volunteer or other volunteer, or a series of senior medical students and/or family medicine residents and/or faculty. The University of Colorado Department of Family Medicine is applying for a grant to establish an exchange family medicine training program with Ukraine.

e) Concentrate most effort on this recommendation (5.5). Many of the recommendations made following the consultation in L'viv last year can be applied later in the Odessa/Kodyma area. If efforts at change are too broad at this point in time, human energy will be defused and the efforts may fail.

### **5.6     *Mobile Brigades***

a) Because the doctors who will work on the mobile brigades are specialists, they should receive additional training as described above *before* they begin work on the mobile brigade. In that way they will be able to more effectively handle a broader range of problems without referral.

b) One rapid method of training would be to place a doctor with a feldsher at a feldsher point for some period of time before initiating mobile brigades. The doctor could then see the breadth of problems and age groups that present to a primary care practice. Doctor and feldsher can work as a team, learning from each other.

c) Separate the 24-hour emergency response function of the mobile brigades, which can be handled by well-trained feldshers, from the regular daily clinical function of doctors working at various sites. Feldshers can transport the true emergency patients to the location where the doctor is working in the day or directly to the hospital at night.

d) Patients must be charged user fees for ambulance calls or they will abuse that service.

### **5.7     *Effect Regulatory Change to Optimize Primary Care***

a) Change Ministry of Health and Oblast regulations to allow more individual discretion by doctors and feldshers regarding what they are able to treat and what they should refer.

### **5.8     *Institution of Regular User Fees***

a) A schedule of mandated user fees should be instituted. Over time, the amount and extent of user fees should be gradually increased.

b) Fees for primary care should be minimal or non-existent. Fees should be concentrated on specialist and non-essential services. This policy will help to drive use of the system toward primary care.

### **5.9     *Develop financial enhancements for effective, efficient primary care***

a) Using models and data that exist currently in Ukraine and elsewhere, develop a system of financial incentives that reward effective, efficient, good quality primary care.

b) Financial incentives should:

1. Encourage effective treatment at the primary point of contact of the patient with the health care system, and discourage referrals, except when appropriate.

2. Encourage out-patient treatment whenever possible, and discourage hospitalization.

3. Encourage rapid discharge of the patient from the hospital, and discourage long lengths-of-stay.

c) Financial incentives can be applied to both providers (doctors and feldshers) and patients (See 5.8 *Institution of Regular User Fees*).

### **5.10    *The Science of Management and Behavioral Change***

a) Numerous consultants have made numerous recommendations for change in the Odessa/Kodyma health care system over the last two years. While progress has been made, some essential changes have not yet taken place. Change is probably one of the most difficult human endeavors. Yet change is inevitable. The task of good managers is to guide change so that those whom the changes will most effect truly participate in planning for change and understand why the changes are happening.

b) An entire science of transcultural management and behavior change has developed in the last 20 years to deal with the tremendous growth in international commerce and exchange.

c) Future consultants for ZRP should be selected for expertise in transcultural management and behavior change. We know the kinds of changes that must take place. Now we must discover how to achieve them.



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## 7.0 Annexes

### 7.1 Scope of Work (Revised January 24, 1997)

#### Objectives:

- (a) To assess the existing primary care network in Kodyma Rayon and assist ongoing reform efforts aimed at strengthening primary health care delivery system.
- (b) To further the development of a model for providing rural primary care that could be replicated in other parts of Ukraine.

**Background:** Kodyma Rayon is located in the northern-western corner of Odessa Oblast and relies almost entirely on agriculture and agriculture-related businesses for its economic base. The economy of Kodyma, as with most of Ukraine, is severely depressed and as a result, local taxes available for health care have fallen drastically. Budgetary funds are not sufficient to support the existing structure of the health care system. Local authorities have been unable to pay health workers for more than four months. Medical supplies are critically low. Medicine is available for critical patients only; non-critical patients must purchase their own medicine.

ZRP consultants conducted an assessment of the health care system in Kodyma in December 1995 and found substantial inefficiency and excess capacity. Only 85.7 % of bed capacity is used, despite an average hospital length of stay of 15.9 days. ZRP consultants suggested that local administrators close all seven of the 30-bed district hospitals, consolidate several departments in the Central Rayon Hospital and reduce staff and beds substantially. It is also worth noting that the population of Kodyma (approximately 37 thousand residents) continues to decrease. The population fell by 10.3 % in 1994 and another 12.1 % in 1995.

Since the original assessment, the chief doctor has taken several steps to restructure the health care delivery system in Kodyma to reduce the excess capacity, bring expenditure in line with available funds and to improve quality of care. In 1996, the Chief Doctor consolidated several departments, eliminated 145 beds and reduced the number of doctors by about 40 % in the Central Rayon Hospital. He also temporarily converted 5 of the 7 30-bed district hospitals into outpatient clinics and developed plans to provide home care through a mobile brigade. Paid services were also introduced in 1996 to augment budgetary funding and local agricultural cooperatives agreed to provide nearly all of the food needs of the hospital free of charge.

#### Statement of Work:

1) *Conduct an extensive site visit of Kodyma rayon:* Assess ongoing efforts to strengthen the primary care delivery system and recommend changes where appropriate. The assessment should include the following components:

a) *System organization*: Describe and assess the organizational structure of the primary health care delivery system in Kodyma rayon (e.g., polyclinics, free-standing ambulatories, mobile brigades, feldsher points, etc.) and recommend changes where appropriate.

b) *Primary Care delivery*: Assess the range of services provided by primary care delivery points and conversely, the range of services that are referred to other facilities. Examine actual referral rates where available.

c) *Staffing*: Assess the staffing arrangements of the primary health care delivery points and the functions, roles and qualifications/training of primary health care providers. Assess whether functions are delegated among staff members most effectively. Assess whether staff members are appropriately trained. Provide recommendations where appropriate.

d) *Logistical support*: Describe and assess whether equipment, office space, patient record systems, administrative systems, and available lab services sufficiently support development of an effective primary health care delivery system

e) *Incentive systems*: Provide input so that an economist can assess which economic incentives exist that promote use/provision of primary health care instead of more expensive specialty and inpatient care when appropriate (e.g., salary incentives, decentralized budgets, user fees, etc.).

f) *Patient-provider relationships*: Assess whether patient-provider relationships adequately foster improved patient health and satisfaction (e.g., providers educate patients, patients are encouraged to take responsibility for health, preventive care is provided, providers are patient-oriented, organization encourages long-term patient-provider partnership, basic tenets of patient privacy are preserved).

g) *Results of recent reforms*: Describe reforms to strengthen the primary care delivery system over last year and assess whether these reforms have been successful. If information does not exist with which one can measure success, recommend how to monitor success over next six to nine months.

h) *Critical obstacles to further reform*: Identify obstacles to further development of the primary health care system in Kodyma and recommend steps for overcoming the obstacles where possible.

i) *Other Miscellaneous Recommendations or concerns*.

2) *Assess ability to replicate Kodyma reforms*: Based on findings in Kodyma, any discussions with health authorities, and on existing documents regarding L'viv PHC

experience, assess whether efforts to strengthen primary health care provision in Kodyma maybe and/or should be replicated in other rural areas.

Key Outputs:

1. Trip report in standard ZRP format.
2. Technical Report documenting assessment findings and recommendations.
3. Debriefing of preliminary findings for Kodyma counterparts.
4. Seminar in Odessa presenting preliminary findings and recommendations to local health administrators and other interested individuals.

## 7.2 LOCALITIES IN KODYMA RAYON WITHOUT DISTRICT HOSPITALS

	Locality	Population
1	Pisarevka	1555
2	Smolyanka	463
3	Alekseevka	1028
4	Semenovka	195
5	Petrovka	448
6	Alexandrovka	218
7	Strymba	339
8	Fedorovka	176
9	Lysogorka	1008
10	Grabovo	1344
11	Kotovtsi	282
12	Small Slobodka	630
13	Tymkovo	831
14	Kirilovka	91
15	Ivashkovo	1409
16	Pirizhnya	1503
17	Serbi	1971

## 7.3 LOCALITIES IN KODYMA RAYON WITH DISTRICT HOSPITALS

Slobodka	4294
Laboushnoe	2584
Krutiya	2071
Shershentsi	3267
Bashtankovo	3086
Zagnitckovo	4528
Budeyi	1933

### 7.3 Feldsher Facilities in Kodyma Rayon

#	Locality	Population	Remoteness from District Hospital in Kms.
1	Pisarevka	1555	6
2	Smolyanka	463	6
3	Alekseevka	1028	5
4	Semenovka	195	3
5	Petrovka	448	8
6	Fkeksandrovka	218	4
7	Strymba	339	12
8	Fedorovka	176	14
9	Lysogorka	1008	10
10	Grabovo	1344	11
11	Kotovtsi	282	6
12	Small Slobodka	630	3
13	Tymkovo	831	5
14	Kirilovka	91	10
15	Ivashkovo	1409	10
16	Pirizhnya	1503	9
17	Serbi	1971	9

#### 7.4 Visits to Feldsher Facilities in Kodyma Rayon

#	Locality	Population	Visits				# of visits per day		
			Clinic visit		Home visit				
			1995	1996	1995	1996	1995	1996	
1	Pisarevka	1555	1358	3300	848	400	7.9	13	5.3
2	Smolyanka	463	1900	2200	1301	891	11	11	-0.4
3	Alekseevka	1028	2517	1807	2696	3044	19	17	-1.3
4	Semenovka	195	1696	2064	308	527	7.2	9.3	2.1
5	Petrovka	448	2900	2877	2100	1569	18	16	-2
6	Aleksandrovka	218	798	1020	106	135	3.2	4.1	0.9
7	Strymba	339	2526	2264	641	684	11	11	-0.8
8	Fedorovka	176	439	1260	141	571	2.1	6.5	4.5
9	Lysogorka	1008	2352	1537	1560	1097	14	9.4	-4.6
10	Grabovo	1344	####	8222	3823	3774	55	43	-12
11	Kotovtsi	282	683	696	134	374	2.9	3.8	0.9
12	Small Slobodka	630	3743	3443	1861	1212	20	17	-3.4
13	Tymkovo	831	4642	3435	2887	1617	27	18	-8.8
14	Kirilovka	91	11	108	29	366	0.1	1.7	1.6
15	Ivashkovo	1409	5600	4880	2300	2480	28	26	-1.9
16	Pirizhnya	1503	4498	7823	573	526	18	30	12
17	Serbi	1971	####	11027	2926	3239	58	51	-7.3



**7.5****LIST OF PARTICIPANTS OF FINAL WORKSHOP AT  
KODYMA CENTRAL RAYON HOSPITAL ON 5 MARCH 1997**

1. Vorotilo -	feldsher	22. Krupel'nitskiy -	feldsher
2. Kolomiets -	feldsher	23. Netuskaya -	feldsher
3. Benu -	feldsher	24. Nis -	doctor
4. Keydalyuk -	feldsher	25. Obuhov -	doctor
5. Ledbus -	feldsher	26. Topan -	doctor
6. Popylnyuk -	feldsher	27. Gritsishin -	doctor
7. Tashkevitch -	doctor	28. Tiosa -	doctor
8. Paboshcko -	doctor	29. Shvets -	doctor
9. Olyanitskaya -	doctor	30. Leongard -	doctor
10. Kolosovitch -	doctor	31. Poplavskaia -	doctor
11. Chudak -	doctor	32. Sukovskiy -	doctor
12. Pokotilo -	doctor	33. Kravetsko -	feldsher
13. Maystruk -	feldsher	34. Trostyanitskiy -	Mayor's Deputy
14. Borsch -	doctor	35. Gavriilyuk -	feldsher
15. Sykovatyy -	doctor	36. Evdodiy -	feldsher
16. Tokartchuk -	doctor	37. Ostapock -	doctor
18. Akimova -	doctor	38. Gelovel -	feldsher
19. Chebanyuk -	chief nurse	39. Skvortsova -	Department Manager
20. Diordienko -	nurse	40. Suhanock -	feldsher
21. Voloshin -	lawyer	41. Goncharuk -	nurse
		42. Adamenko -	doctor

## **7.6 LIST OF ALL PERSONS CONTACTED IN THIS CONSULTATION**

1. John Stevens, Abt Associates, L'viv (contact in Colorado)
2. Tom Wittenberg, Director of the ZRP Odessa office
3. Jennifer Lissfelt, ZRP Odessa office
4. Dr. Akim Litvak, Oblast Health Administration
5. Dr. Vladimir Maurodiy, Oblast Health Administration
6. Ludmilla Omelchenko, MD, ZRP Associate from Kiev
7. Natasha Antanasova, MD, ZRP employee in Odessa
8. Sergey Kolesnick, interpreter
9. Ira Zabolotnaya, interpreter
10. Valery Dobromislov, driver
11. Slavic Ovseantsky, driver
12. Mr. Trostyanetskiy, Deputy Mayor of Kodyma on Social Policy
13. Boris Nedbas and family, feldsher, Serbi
14. Dr. Vitaly Borsch, Chief Doctor of Kodyma Rayon Health System
15. Dr. Maxim Sucovaty, Deputy for the Health Network
16. Dr. Olenitskaya, dentist and Director, Labushnoe District Hospital and Polyclinic
17. Dr. Zhurba, Chief Doctor, Zagnitckovo District Hospital and Polyclinic
18. Mr. Maystruk, feldsher
19. Dr. Boroshko, pediatrician and Chief Doctor, Shershentsi District Hospital/Polyclinic
20. Mr. Pendrakovskiy, feldsher
21. Mr. Kiydalouk, feldsher
22. Mr. Kolomiets, feldsher
23. Ms. Nazarchuk, nurse
24. Ms. Luzhanskaya, nurse
25. Ms. Krys'ko, nurses
26. Mr. Snigur, feldsher
27. Dr. Victor Tokarchuk, Deputy Chief Doctor in charge of Therapeutics, Central Rayon Hospital.
28. Dr. Ivan Tiosa, Chief Doctor of Kodyma Polyclinic
29. Dr. Valeriy Lengardt, Chief of Infectious Diseases, Central Rayon Hospital
30. Dr. Sergey Sholopa, Director of the medical school, Katovsk
31. Dr. Oleg Pivak, General Pediatrician and Chief Doctor of Children's Polyclinic #6
32. Dr. Sereda, pediatrician
33. Dr. Alexander Karvietsky, Head of Odessa Oblast Health Administration
34. Dr. Vladimir Kolodenko, Pro-rector, Odessa Medical University
35. Dr. Vladimir Gritsenko, Chief Doctor, Kominternovo Central Rayon Hospital
36. Dr. Marina Kalueva, Oblast Deputy, Pediatrics
37. Dr. Alexander Liman, Chief Doctor, Oblast Childrens' Hospital
38. Dr. Nelly Gozhenko, Head of Polyclinic, Oblast Central Hospital
39. Dr. Igor Kushokovsky, Oblast Deputy, Psychiatry
40. Dr. Igor Bitchov, Chief Doctor, Razdelnaya Central Rayon Hospital
41. Dr. Andry Gaiduk, Director, Dneipropetrovsk Family Medicine Clinic
42. Dr. Zhanna Parkhomenko, ZRP Technical Advisor (Kiev Office)